



COMMENTS OF APX, INC. ON THE POWER PROCUREMENT PLAN PROPOSED BY THE ILLINOIS POWER AGENCY

Pursuant to 220 ILCS 5/16-111.5(d)(2), APX, Inc. (“APX”) respectfully submits the following comments on the Draft Power Procurement Plan (“Plan”) filed by the Illinois Power Agency (“IPA”) with the Illinois Commerce Commission (the “Commission”) on August 16, 2010. We appreciate the opportunity to provide these comments and hope that they are useful to the IPA and the Commission in their consideration of the Plan. The IPA expects to file its final Plan with the Commission for posting on September 29, 2010.

SUMMARY OF COMMENTS¹

APX submits these comments because it believes its North American Renewables Registry™ (“NAR”) should be available as an option for market participants in meeting the REC registry portion of the Plan, especially for renewable energy certificates (“RECs”) produced by generators located outside of Illinois. The Illinois Public Utilities Act (“PUA”) as well as the Plan list the PJM Environmental Information System Generation Attribute Tracking System (“PJM-GATS”) and the Midwest Renewable Energy Tracking System (“M-RETS”) as eligible

¹ APX provided similar comments during the August 26, 2010 workshop on the Plan. Element Markets during the August 31, 2010 IPA workshop also suggested that alternative REC registries be considered for use in the Plan. APX also filed comments in *Illinois Power Agency – Petition for Approval of Initial Procurement Plan*, Docket No. 09-0373 (2009) (the Commission found that APX’s comments may be discussed in any workshop process going forward.).

REC tracking registries for the Illinois RPS. Neither the PUA nor the Plan, however, explicitly foreclose the possibility of an additional tracking registry to PJM-GATS or M-RETS.

NAR would be particularly useful to the IPA, utilities, the Commission and market participants because it would allow for the registration of RECs from generators that qualify under the Illinois renewable portfolio standard (“RPS”) rules but that are not necessarily covered by PJM-GATS and M-RETS. This is consistent with the Plan and the policy found in the PUA to allow for the documentation of RECs produced outside of Illinois. Incorporating NAR in the Plan as an option is particularly important as the percentage of renewable generation requirement under the PUA and the RPS rules increase substantially over time, increasing the potential that RECs from generating facilities located in adjoining states to Illinois (and possibly other states if cost-effective resources are not available) may be used to satisfy Illinois’s RPS requirements. And any usage of NAR will remain strictly optional and cost-effective – participants that do not use NAR will not have to pay anything for the system.

Moreover, the use of NAR as an alternative will not impose any additional administrative obligations on ComEd and AIU to track RECs acquired through the Plan. It simply will provide participants an additional tracking method should they choose to utilize it

BACKGROUND ON APX

APX is the leading infrastructure provider for United States environmental and energy markets in renewable energy and greenhouse gases, including renewable energy certificates (“RECs”), energy efficiency and conservation certificates and carbon offset certificates such as voluntary emissions reductions. With a singular focus on providing trust, transparency, and integrity for environmental markets, the company is the solution of choice for every major renewable energy market in North America and greenhouse gas markets worldwide. In 2010,

more than 1,300 corporations across the United States and internationally will rely on APX for integrity in environmental markets. In particular, APX has designed all, and administers several, of the regional REC tracking systems in the United States.

THE NORTH AMERICAN RENEWABLES REGISTRY™

The North American Renewables Registry provides REC origination for renewable energy facilities across North America, using the same trusted APX market infrastructure that provides REC tracking in all U.S. REC markets. NAR was launched on June 1, 2009 and has issued more than 900,000 certificates since its launch.

NAR creates a REC for every MWh of renewable energy produced by a generator and manages the complete life cycle of each REC from issuance to retirement. When RECs are retired in NAR they can only be retired for one purpose (e.g., a specific state RPS or voluntary program), eliminating the possibility of it being double counted. The method of reporting data to NAR is identical to what is used in several registries, including M-RETS. Qualified Reporting Entities, such as the Midwest ISO, report data on a monthly basis for facilities in their region.²

NAR currently serves as the compliance registry for the State of Missouri. Investor-owned utilities in Missouri will use NAR to demonstrate compliance with Missouri's Renewable Energy Standard. Renewable energy facilities supplying RECs to Missouri IOU's will therefore be registered in NAR. *These facilities will not be able to also participate in the Illinois market unless NAR is approved as an eligible registry.* Renewable energy generators registered in NAR can also participate in the North Carolina market and most recently legislation passed in Puerto

² There is an exemption for small distributed energy facilities which in certain cases can self-report their generation (similar to the practice in M-RETS).

Rico recommending the use of NAR as the compliance registry for their Renewable Energy Portfolio Standard (Ley 82-2010³).

Unlike other registries, NAR fees are incremental in nature, depending on an account holder's level of the activity in the system. There is an annual subscription fee of \$2000 for a General Account (which is the account type that Illinois utilities would maintain if using NAR) and a one-time registration fee of \$750. Any additional fees would be based on the amount of certificates issued, transferred and/or retired in NAR. The issuance fee (generally covered by the Generator owner of the facility) is \$0.05 per certificate. The transfer fee (paid by the recipient of the certificates) is \$0.01 per certificate and the retirement fee is \$0.10 per certificate. This transparent and volumetric pricing structure allows a decision about renewable supply to incorporate the cost of choosing resources that deliver the RECs in NAR. Cost structure is incremental and can be included in bid price

BENEFITS TO ILLINOIS

The North American Renewables Registry™ can assist Illinois utilities and market participants to meet the mandates of Illinois law, as well support the Commission with implementing and overseeing its regulatory mandates, in several ways:

1. Broadening the reach of the Illinois market. NAR is serving as the compliance registry for the Missouri RPS – generators registered in NAR for that purpose would be available to Illinois compliance entities. In addition, APX has set up import – export links between the North American Renewables Registry™, M-RETS and the NC RETS in order to broaden the market infrastructure in the region. APX is

³ <http://www.senadopr.us/Leyes%20y%20Resoluciones/Ley%20N%C3%BAm.%20082%20de%2019%20de%20julio%20de%202010%20%28P.%20del%20S.%201519%29.PDF>

actively engaged in further discussions around import and exports with other registries such as WREGIS and ERCOT. This broader marketplace will allow Illinois utilities to source from a larger set of facilities. APX also has experience in other states implementing delivery verification through the use of NERC tags, which may be applicable for confirming delivery in Illinois.

2. Expand pool of possible generators. NAR allows for aggregation of small and residential distributed generation facilities in a manner similar to that used in M-RETS. APX is working with stakeholders in all areas that NAR serves to adopt new methodologies to facilitate easier registration for small and aggregated facilities.
3. Implementing and verifying compliance with Illinois law. The complete audit trail in NAR helps provide critical oversight capabilities to assist NAR the Commission in verifying compliance with Illinois law. Additionally, the system provides data for environmental disclosure labels and allows for verification of green product claims. The system will enable specific log-in and access for Illinois regulators to verify REC retirements by entities complying with Illinois law, granting them direct access to the data they need to oversee the market. In addition, NAR can be easily modified to generate reports tailored to the specific needs of the Commission and its staff, as described more fully below.
4. Providing an additional proven, trusted and low-cost option for REC issuance and tracking for electric utilities and electric service companies. NAR is powered by the most widely used, highest volume and technically advanced environmental market infrastructure currently in use. Developed over the course of the last decade, and with more than 2 billion environmental credits under management, APX market infrastructure sets the standard for ensuring integrity in environmental markets. As

an independent and trusted provider of infrastructure solutions, APX is fully committed to the highest market transparency and a level playing field for all market participants and stakeholders.

5. Providing a flexible platform that can be adapted to maximize value for participants and consumers. APX remains committed to provide its users with the ability to generate and capture maximum environmental value for their clean generation. Resource categories that are specific to Illinois will be added upon NAR's designation as an eligible Illinois compliance registry. And NAR will not remain static. Portfolio standards can and do change over time, and as they do, the NAR system will be modified to keep pace.

COMPLIANCE REPORTS CAPABILITY

NAR can readily meet all of the Commission's reporting requirements. APX regularly produces similar reports for other regional REC registries in the United States, and will be able to accommodate the Commission and its staff with any level of reporting necessary. In addition, the system provides administrator access to regulators, allowing them to review retirement and compliance data that has been tracked and recorded.

APX's approach to working with regulators in developing timely and impactful reports has been validated through its extensive dealings with the systems it has designed and/or administered. The same commitment to transparency and service would be applied to the adaptation of NAR to the needs of the Commission and those of Illinois generators, market participants and consumers.

ROBUST SECURITY AND DATA PROTECTION STANDARDS

The North American Renewables Registry™ is built on a secure, web-based platform, with continuous back-ups of data utilizing two data centers in separate locations to guard against any loss of data or access. Industry standards and practices for log-in security and password encryption are implemented in NAR. Technical details are included in Appendix A.

CUSTOMER SUPPORT

APX offers NAR account holders a proven set of user-friendly services. From 8:00 a.m. through 7:00 p.m. Eastern Time, Monday through Friday, except for holidays, the NAR Administrators are available to field help calls and requests, including any program, policy and regulatory calls or questions. The NAR Administrator also assigns user IDs for new accounts, and sets initial and re-set passwords. The NAR Administrator is provided with additional APX resources for the escalation of second level and higher level support issues, including program-related problems, application-oriented problems and infrastructure-related problems. The APX Help Desk will also be available to provide 24x7 support for handling first-level help calls and requests. The APX Help Desk has been providing 24x7 support for NEPOOL GIS, MIRECS, M-RETS, NC RETS, WREGIS and NAR since its inception nine years ago.

COSTS AND FEES

The use of NAR would be supported by user fees, with no charge to the Commission. Fees are based on the level of a user's activity in the system and not on a fixed-cost based on load served model, as in other registries. This allows electric utilities and electric service companies to participate in NAR at a lower cost than they would incur at registries that base fees on total retail

load served by a load serving entity, such as M-RETS and PJM-GATS. The Fee Schedule for NAR is included in Appendix B.

PROPOSED LANGUAGE

For the reasons set forth above, APX respectfully requests that the Commission authorize the use of its North American Renewables Registry™, in addition to PJM-GATS and M-RETS, for demonstrating compliance with the Illinois RPS. Suggested language for the two identical sections on Compliance Tracking (page 39 and 55 of IPA Draft Procurement Plan) is included below:

“PJM Environmental Information System’s (“EIS”) Generation Attribute Tracking System (“GATS”), ~~and~~ the Midwest Renewable Energy Tracking System (“M-RETS”) and the North American Renewables Registry (“NAR”) will be utilized to independently verify the location of generation, resource type and month and year of generation. GATS tracks generation attributes and the ownerships of the attributes as they are traded or used to meet renewable portfolio standards (“RPS”) and other programs, typically for generators whose energy is settled in the PJM market or whose facility is located in the PJM footprint. M-RETS tracks renewable energy generation and assists in verifying compliance with individual state/provincial RPS requirements or voluntary programs, ~~typically for generators located in the MISO footprint and other RTOs outside of PJM in South and North Dakota, Minnesota, Wisconsin, Iowa, Illinois and Ohio.~~ **NAR tracks renewable energy generation from facilities typically outside of the M-RETS and PJM footprints.”**

Thank you for your consideration of these comments. Should you have any questions for APX, or requests for further information, feel free to contact either Lars Kvale or Jose

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APPENDIX A: APX REGISTRIES TECHNOLOGY INFRASTRUCTURE

Hardware Platform

Our hardware infrastructure is built on rack-mount production grade servers from first-tier name-brand hardware manufacturers. The Registries use the Microsoft Server Operating System (OS). Database services will be based on Microsoft SQL Server with the latest Service Pack and security patches. The servers have sufficient online high-speed storage to permit the retention of multiple years of transaction-level historical data online.

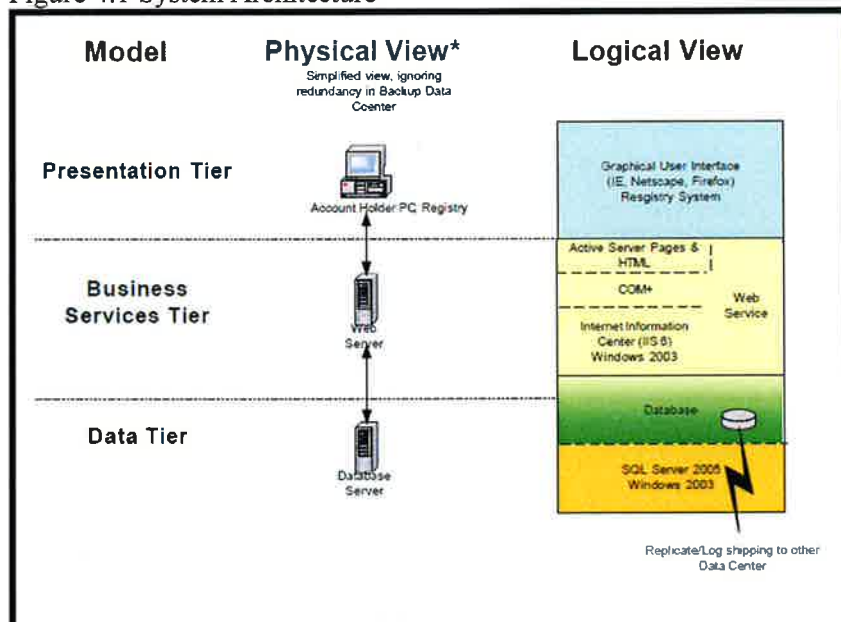
In addition, our platform uses the following technology:

- Geographically distributed application and database servers using RAID arrays and power sources (for redundancy and information integrity);
- Automatic remote replication (for disaster recovery);
- Automated differential backup;
- Systems are configured for common points of failure which include:
- Dual power supplies connected to separate PDU devices;
- Disk RAID configurations using hot-swappable devices;
- RAID 1, 1+0 (10) and 5 technology employed depending on the application and performance requirements.

System Architecture

The Registry infrastructure is built on two distinct platforms with a typical three-tier architecture model. The layered implementation model shown in Figure 4.1 describes the system architecture. The presentation tier includes all HTML and JavaScript that executes the client-side in a browser. Other than the commercial web browsers running on their workstations, registry users are not required to install any software on their workstations. All communications use the TCP/IP protocol.

Figure 4.1 System Architecture



APX Data Centers

- Redundant facilities – San Jose, CA. and Dallas, TX.
- Facilities meet Uptime Institute (www.uptime.com) Tier III classification for Site Infrastructure Performance, with measured uptime of 99.999% over the last 3 years. Facilities summary:
- N+2 power and A/C capabilities.
- Dallas facility has UPS capacity to maintain full power while generators come up to full operational capacity.
- San Jose facility uses fly-wheel technology to maintain full power while generators come up to full operational capacity.
- Generators have a 3 day fuel supply at full capacity before re-fueling is required.
- Fire protection using Dry-Pipe, double pre-action and VESDA fire detection.
- Buildings are configured in a bunker style configuration. NOTE: Dallas facility is located in a multi-story building.
- Physical access to the facilities is controlled by guard and electronic/bio-metric methods, with camera monitoring. Cameras are positioned to view all facility floor space, monitored by on-site guards, and recorded for later playback.
- Access to the hardware is controlled by bio-metric authentication.
- For both Data Centers, IBM Global Services personnel are contracted to be available to assist APX staff on a 24x7 basis. This allows APX to a 24x7 local coverage for both Data Center locations, without the need for APX staff to be present in the Data Centers.

System Security

APX monitors the leading Security Mailing Lists for current information on vulnerabilities and exploits to determine their impact to our services. Updates are applied as required to maintain a secure environment and continuation of services. In addition, APX is in the process of complying with the FERC/NERC CIP security standards using the ISO 27001 and 27002 standards as the framework. APX has membership in the Department of Homeland Security (DHS), National Infrastructure Protection Center (NIPC) InfraGard program.

System Monitoring is accomplished using several methods which include:

- Agents on the hardware that watch for and report out-of-bounds conditions or failures.
- Capture of running system conditions to determine usage and performance trends.
- Monitoring of system response to determine uptime.
- Monitoring of critical services and notification of failures.
- Monitoring of critical network resources and reporting of out-of-band events and failures

Network Security

APX data centers are protected using industry-standard equipment and access methods, including:

- Routers front the Internet. Each router will be setup to allow acceptable network traffic to pass through using the appropriate filters for known attack methods.
- Firewalls sit behind the routers and will be setup in the “deny all” method, allowing only the traffic appropriate for the applications being serviced inbound to the data center.
- Dual Tier-1 ISP carriers with each carrier taking a different path out of the facility.
- ISP connections are connected to separate Core switches provided by our service provider.
- Each Core switch is connected to separate APX routers using dual/meshed switches.
- APX routers are connected to redundant firewall devices using dual/meshed switches.
- APX routers and firewalls are configured to sense failures on all interfaces and execute automated fail-over for continued passage of network traffic.
- Connection to service provider is 10 Mbps, expandable to 100 Mbps.

- All APX router, firewall, and switch hardware have redundancy in hardware, power supply, and PDU feed.

Servers Security

Server systems are placed behind firewall and IPS devices. Direct access to the servers will only be allowed for approved APX personnel responsible for the Registry program. APX personnel access to the servers is only allowed from the APX Corporate network. There will be no direct access to the servers from the Internet, except for the Registry application User Interface.

Servers will have anti-virus and file system monitoring utilities that will report events to a central console monitored by the 24-hour Operations group and IT Security Staff.

An appropriate backup of each server's operating system will be accomplished to allow for the quick restoration of a server in the unlikely condition that the system becomes corrupt.

Application Security

Access to the application levels will be programmed into the application based on the authenticated user. Login name and password will be used to authenticate each user. Each user is assigned a role upon login to the portal. Each role is assigned access to a set of modules. Each module provides for a set of functions that enables the user to accomplish a task or set of tasks.

End-users Security

Access to the Registry Portals will be 128-bit SSL communications. Once connected to the Portal, individual users will be prompted for their unique username and password. Once the username and password are authenticated, the user will be presented with the initial application interface.

Disaster Recovery and Business Continuity

The combination of our dual data centers, hardware configuration, data replication and backup gives APX significant Disaster Recovery and Business Continuity capabilities. Our capabilities are:

- Fully redundant data center locations in geographically separated regions of the United States (San Jose, CA and Dallas, TX).
- Fully redundant network infrastructures in each data center location and Operations facility.
- Fully redundant server and database hardware in each data center location.
- Data replication between the data centers is used to maintain synchronization between primary and secondary database systems.
- Electronic vaulting to off-site facility used for near-real time backup of critical data Off-site Operations facility in the event that the primary APX Operations facility can not be used. This would include workstations, network access, and automated phone re-routing. The off-site facility is located less than 30 minutes from the primary APX offices in San Jose.

APPENDIX B: NORTH AMERICAN RENEWABLES REGISTRY™ –SERVICE FEES

FEE SCHEDULE:

Type	Size	Registration (\$)	Subscription (\$)
Asset Registration: Micro Generator	<40 kW	0	50
Asset Registration: Small Generator	40 kW to <1MW	250	500
Asset Registration: Medium Generator	1 MW to <10MW	500	1000
Asset Registration: Large Generator	>10MW	1000	2000
Asset Registration: Energy Efficiency project	Any	500	1000
Account Registration: Generator Account	n/a	250	0
Account Registration: General Account	n/a	750	2000
Account Registration: Retail Purchaser Account	n/a	0	1000
Account Registration: Qualified Reporting Entity	n/a	0	0

Volumetric Fees:

Issuance Fee: \$0.05 per Certificate issued

Transfer Fee: \$0.01 per Certificate transferred

Retirement Fee: \$0.10 per Certificate retired

Export Fee: \$0.05 per Certificate Exported

FEE TYPES:

Registration Fee. Subscriber shall pay a one-time Registration Fee at the time that it registers a Generating Asset, Energy Efficiency Asset and/or opens an Account in the Registry, which Registration Fee will be based upon the size of Generating Asset and/or the type of Account(s) opened by Subscriber. If Subscriber is registering more than one Asset, Subscriber will pay a separate Registration Fee for each Asset registered.

Subscription Fee. Subscriber shall pay an annual Subscription Fee, payable at the time that it registers in the Registry and in January of each subsequent calendar year, which Subscription Fee will be based upon the size of any Generating Asset registered and the type of Account maintained by Subscriber. If Subscriber registers more than one Asset, Subscriber will pay a separate Subscription Fee for each Asset registered. Subscription Fees will not be pro-rated, and the entire annual Subscription Fee will be due, regardless of when Subscriber first registers in the Registry.

Volumetric Fees. Subscriber shall pay a monthly Volumetric Fee, which will be determined as follows:

(1) Issuance Fee: Account Holder shall pay an Issuance Fee for each Certificate issued in the Registry for a project registered by Account Holder.

(2) Transfer Fee: Account Holder shall pay a Transfer Fee for each Certificate transferred to one of Account Holder's accounts. This includes Certificate transfers from other REC registries.

(3) Retirement Fee: Account Holder shall pay a Retirement Fee for each Certificate retired in one of Account Holder's accounts in the Registry.

(4) Export Fee: Account Holder shall pay a Transfer Fee for each Certificate exported to another REC registry.


VERIFICATION

State of New Jersey)

)

County of Hudson)

Jose Ibiatorremendia states that he is the Vice President and general Counsel of APX, Inc.; that he has read the foregoing comments of APX Inc. and knows the content thereof; and that to the best of his knowledge, information and belief, based upon reasonable inquiry, the contents are true and correct.



Jose Ibiatorremendia

Subscribed and Sworn to
Before me this 14th day of September, 2010.



Notary Public

